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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/779,657 | 02/18/2004 | Shinji Kashiwada | 01-591 | 1114 |

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EXAMINER

LUU, MATTHEW

ART UNIT

PAPER NUMBER

3663

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,657

Applicant(s)

KASHIWADA ET AL.

Examiner

LUU MATTHEW

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,4 and 8-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/18/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn et al (6,947,064) in view of DeLuca et al (6,559,813).

Regarding claim 2, Hahn discloses (Fig. 5) a display method adopted in a vehicle for allowing a driver of a vehicle to three-dimensionally (3D) recognize an information conveyor (Fig. 3, element 4C onto the speedometer scale T) to the driver, the method comprising the steps of:

determining a position of existence of the information conveyor (as shown in Fig. 1, the determined position of the element 4C of the speedometer at the 100 km/h position; Fig. 2 shows the determined position the element 4C is changed to the 70 km/h position; and Fig. 3 shows the determined position of element 4C is changed to the 130 km/h position) (Column 7, lines 23-33);

changing the determined position of existence of the information conveyor (4C) (Figs. 3 and 4), when an object (precedent vehicle 6) between the determined position of the information conveyor and the vehicle (Fig. 3 shows the object 6 is between the information conveyor 4C and the vehicle (the bottom of the display 1)), to a position

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other than a location behind the object (6) in advance of displaying (Fig. 4 shows the element 4C is changed to the position that is in front of the object 6); and

displaying the information conveyor (4C) at the changed position (Fig. 4). See column 7, line 55 to column 8, line 48.

Hahn further discloses that the object (6) can be “a type selected from the group consisting of vehicle, obstacle, pedestrian and/or traffic sign” (Column 10, lines 55-58). Thus, it is obvious that the object (6) can also be considered as an “information traffic sign conveyor” and the element (4C) can also be considered as the object, and vice versa, since both of these image elements (4C through 4E) change their positions relatively to each other. See column 7, lines 33-34; and column 8, lines 45-48.

Hahn fails to teach the 3D image can be recognized by a driver “by utilizing a difference in vision between eyes of the driver”.

However, the limitation “by utilizing a difference in vision between eyes of the driver” in the preamble is for intended use. This preamble recites the use or purpose of the claimed invention generally does not limit the claim.

DeLuca (6,559,813) discloses (Figs. 8-13) a 3D stereoscopic image display system utilizing by utilizing a difference in vision between eyes of the user (column 9, lines 25-46; and column 10, lines 17-32).

Therefore, it would have been obvious to a person of ordinary skill in the art to incorporate the teachings of using a difference in vision between the user's left eye and right eye to view the 3D image since this is conventional in the art.

Regarding claim 6, Hahn discloses (Fig. 1) displaying the information conveyor (4C) once at the determined position of existence (at 90 km/h position) before being changed.

Claim Rejections - 35 USC § 103

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn in view of DeLuca as applied to claim 2 above, and further in view of Nagano et al (US 2004/0183750).

Regarding claims 5 and 7, Hahn further changing color and position of the 3D image based on the threshold of speed of ones own vehicle (Column 4, lines 12-31).

Hahn fails to teach changing the color of the information conveyor relative to a color of a background.

However, Nagano discloses (Figs. 1, 5 and 6) a vehicle display device for displaying an image (10) outside of the vehicle. Nagano further discloses (Figs. 5 and 6) the color of the information conveyor (display speed 10) can be changed in relative to a color of a background (C). See sections 45-47 and 50-51).

Therefore, it would have been obvious to the person of ordinary skill in the art to use the method for changing the color information conveyor (display speed) in relative to a background into the method for displaying the speedometer of Hahn to provide a driver with a 3D vehicle display device that is easy to recognize any information conveyor, such as the speed of the vehicle, road signs, or pedestrian. This method also provides the driver with a more safety-driving environment.

Election Without Traverse

Applicant's election without traverse of Group I, species B in the reply filed on February 24, 2006 is acknowledged.

Accordingly, claims 1, 3, 4 and 8-16 has been withdrawn as being drawn to a nonelected invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Janssen (US 2004/0178894) discloses (Figs. 4 and 6-8) a head-up display method for displaying of an object situated outside a vehicle with regard to the position of the driver.

-Schofield et al (US 2005/0200700) disclose (Figs. 1-10) a vehicle display system for display images outside the vehicle.

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-Ishida et al (US 2001/0040505) disclose (Figs. 23-24) a navigation display system for displaying 3D graphical objects.

-Donath et al (6,977,630) disclose (Fig. 3) a vehicle display system for displaying guidance elements or objects, or a variety of other indicators to assist the driver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (571) 272-7663. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACK KEITH can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Luu



MATTHEW LUU
PRIMARY EXAMINER